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ABSTRACT

Ten introductory psychology textbooks and five social psychology textbooks were examined for accuracy in their treatment of human aggression. Attention was focused on the treatment of the concept of emotional catharsis, and specifically to two frequent usages of catharsis (behavioral and emotional catharsis) and the social learning involved in emotional catharsis. Of the 10 introductory psychology textbooks, whose authors are identified, seven discussed catharsis. It is claimed that none of the seven psychology textbooks treated catharsis in a satisfactory manner. Five texts correctly separated behavioral and emotional catharsis, but failed to mention the origins of emotional catharsis in social learning. Other inaccuracies were also found. The specialized textbooks in social psychology were not found to treat emotional catharsis any more accurately. Implications of the findings include: (1) growth of the knowledge base exacerbates the problem of accuracy and concensus; (2) theoretically the problem of textbook validation for accuracy may be understood in terms of social learning theory; and (3) defining a concept without critical evaluation leaves a false impression that the concept is viable. (SW)

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INACCURACY OF KNOWLEDGE REPRESENTED IN COLLEGE TEXTBOOKS: AGGRESSION AS AN EXAMPLE

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Critical reviews of college textbooks frequently discuss such things as coverage of topics, readability, interest level, and supplementary materials (e.g., Eison, 1983). There are, however, additional issues to consider such as language that excludes females, distortions that overstate the robustness of research findings, graphic presentations that obscure the true variability of data, and the inclusion of research findings that have never been subjected to journal review.

In my 1982 review of gender biased language, it was shown in experiment after experiment that male pronouns and nouns, even when intended generically, lead readers and listeners to think less often of females than males and to consider the topic as less appropriate for females than males. We further showed that the majority of college textbooks continue to exclude female thoughts and images from consideration by using male pronouns and nouns to mean people generically (Bertilson, Springer, & Fierke, 1982).

Distortion in general psychology textbooks has been clearly demonstrated by an investigation into the reporting of the classic 1920 "little Albert experiment." That experiment, you may recall, was a cornerstone in the growth of psychological behaviorism. John B. Watson and his graduate student, Rosalie Rayner, classically conditioned the fear of a rat by joint presentations of the rat and a loud noise. After eight conditioning sessions they demonstrated stimulus generalization--generalization of the fear response to a rabbit, a dog, a fur coat, cotton wool, Watson's hair, and a Santa Claus mask (Watson & Rayner, 1920. Cornwell and Hobbs (1977) found at least one distortion of this classic experiment in 60 percent of the textbooks they reviewed. Some of the distortions were trivial. But other mistakes were less than trivial--for example, to imply that conditioning occurred in one trial. Some mistakes seemed to systematically place the experiment in a more favorable light--some writers have implied that the conditioning of Albert is only one example from a series of published articles. This distortion suggests a

HE 017 040

larger sample, which makes the investigation seem more substantial than it actually was.

"Idealized" curves and plots of "typical" or "representative" results are being increasingly used in graphic presentation of psychological results in introductory textbooks. According to Shepard (1983), such figures fail to provide (a) any indication of the variability of the data and (b) any basis for judging how adequately curves represent those data. Such graphic demonstrations fail one of the primary goals of introducing students to a field of science--the cultivation of some sophistication about deriving inferences from data and the ability for critical evaluation of incomplete and exaggerated reports.

Inclusion in college textbooks of unconfirmed research findings has been reported by Robert and Barbara Sommer (1983). Their critical analysis dealt with the "Milwaukee Project." The Milwaukee Project was begun in the late 1960s as an early intervention program in which children at high risk for mental retardation were given an intellectually enriched environment and provided with good nutrition and health care beginning within the first year of life. In their follow-up assessments, the original investigators reported average IQ difference of 24 points between the experimental group and a matched control group. Such a large change in IQ might raise some doubts. Nevertheless 7 out of 8 abnormal psychology textbooks and 8 out of 15 developmental psychology textbooks published during 1981-1982 mentioned the study. Further investigation by the Sommers lead to the discovery that none of the citations of the Milwaukee Project were from refereed journals. The citations were from unpublished papers, technical reports and book chapters. For example Coleman, Butcher, and Carson (1980) described the work in a full paragraph as a "rigorously controlled experiment." Yet their sole source was a 1972 HEW Progress Report. The Sommers' analysis yields a picture of research findings becoming widespread in textbooks in two major areas of psychology without ever having been subjected to journal review.

I recently evaluated the treatment of aggression in a social psychology textbook (Bertilson, 1983a). In that review I concluded that the discussions of the frustration-aggression hypothesis, research methodology, physical attack, the "weapons effect", and social learning theories of aggression are sometimes superficial, out of date, and in error.

The issues raised in that review and the issues raised by the criticisms of college textbooks described earlier led me to examine ten introductory psychology textbooks and five social psychology textbooks on my shelf for accuracy in their treatment of human aggression. I chose to look specifically at the treatment in these books of the concept of emotional catharsis. I chose emotional catharsis for two reasons. First, it has been a

widely influential concept. The assumption of an instinct toward aggression and the accompanying process of catharsis has been an assumption of both psychoanalytic therapy and therapies not formally associated with psychoanalysis. The concept of catharsis has also been widely accepted by large segments of the general public (Quanty, 1976).

Second, I had already observed that emotional catharsis was, in my view, inaccurately treated in Phil Zimbardo's (1979) Psychology and Life as well as Penrod's Social Psychology. Zimbardo's (1979) discussion of emotional catharsis left out the critical work of Hokanson, Willers, and Koropsak (1968) even though Zimbardo discussed earlier work of Hokanson's. What Hokanson, et al did was to demonstrate that rewarding an aggressor leads the aggressor to experience reduced physiological arousal whenever he or she aggresses against someone. Concomitantly they demonstrated that contingent punishment of the aggressor leads the aggressor to experience heightened physiological arousal whenever he or she aggresses against someone. Finally, Hokanson et al demonstrated the same effects on physiological arousal of rewards and punishments of nonaggressive behavior. While the current zeitgeist in the philosophy of science convinces us to be tentative, skeptical, and cautious about research evidence (e.g., Gergen, 1982; Royce, 1975), conceptual replications are important ways we measure the validity of research (e.g., Bertilson, 1983b). Our confidence, and the confidence of others, for example Geen & Quanty (1977), in Hokanson et al's (1968) conclusion that reductions in physiological arousal can be learned are increased because of an extension and replication of their findings by Stone and Hokanson (1969).

The omission of Hokanson et al's (1968) work in both the Zimbardo (1979) and Penrod (1983) texts left the reader with a substantially different conclusion than would have occurred with the inclusion of the Hokanson et al (1968) research. It left the impression that there is a necessary link between physically aggressing against someone and subsequent reduction in physiological arousal. And that failure to physically aggress against someone will necessarily cause physiological arousal to remain high.

Hokanson's research was published in one of the major forums for aggression research, Journal of Personality, and has been thoroughly discussed and evaluated in the principal books and reviews of human aggression ever since--Bandura's (1973) book Aggression: a social learning analysis, Baron's (1977) book Human aggression, Geen's (1976) chapter in Geen and O'Neal's Perspectives on aggression, Geen and Quanty's (1977) chapter in Berkowitz's Advances in experimental social psychology, Hokanson's (1970) chapter in Megargee & Hokanson's The dynamics of aggression, Kaufmann's (1970) book Aggression and Altruism: a Psychological Analysis, Quanty's (1976) chapter in Geen and O'Neal's Perspectives on Aggression, Scherer, Abeles, & Fischer's

(1975) book Human Aggression and Conflict: Interdisciplinary Perspectives and Zillmann's (1979) book Hostility and Aggression. Accordingly it can not be argued that the omission of Hokanson et al. (1968) work was due to the obscurity of the research.

In order to keep my present review of ten introductory psychology and five social psychology textbooks narrowly focused I chose to evaluate two central issues concerning catharsis of which there seems to be wide agreement among researchers, theoreticians, and editors. The first issue is one of definition -- definition of two separate phenomenon. Berkowitz (1962) suggested that two different kinds of phenomena have been given the label "catharsis." The most common version of the catharsis hypothesis in the psychological literature maintains that the performance of an aggressive act reduces the instigation to aggression. This is known as behavioral catharsis.

The second relatively frequent usage of catharsis doctrine deals with feelings of pleasantness and "letting off steam" and with concurrent reduction in physiological arousal after performing a hostile act. This is known as emotional catharsis. Both meanings of catharsis are well known. In addition it is well known that there is no necessary link between behavioral catharsis and emotional catharsis. Sampling from the books and articles in my office, the two-meaning, unlinked position I have just described is preferred in 6 books on aggression (Bandura, 1973, Baron, 1977; Berkowitz, 1962; Kaufmann, 1970; Scherer, Abeles, & Fischer, 1975; Zillmann, 1979), 4 book chapters (Geen & Quanty, 1977; Hokanson, 1970; Quanty, 1976; Tedeschi, 1983), and 4 refereed journals (Berkowitz, 1958; Berkowitz, 1964; Berkowitz, 1965; Berkowitz, 1978).

Strong consensus also exists on the social learning nature of emotional catharsis. The tension-reducing effects of an aggressive, or non-aggressive response, is an acquired, learned reaction; and that the observed cathartic effects of aggression are only a special case of a more general set of autonomic-behavioral learning processes. Any behavioral response to a provocation is potentially capable of acquiring cathartic-like properties (Hokanson, 1970). This social learning position is well known and well supported. Sampling from the books and journals in my office, the social learning position is supported by 5 books (Bandura, 1973; Baron, 1977; Kaufmann, 1970; Scherer, Abeles, & Fischer, 1975; Zillmann, 1979), 4 book chapters (Geen, 1976; Geen & Quanty, 1977; Hokanson, 1970; Quanty, 1976), and 3 refereed journal articles (Berkowtiz, 1978; Hokanson, Willers, & Koropsak, 1968; Stone & Hokanson, 1969).

Of the ten introductory psychology textbooks I sampled, seven discussed catharsis (Houston, Bee, & Rimm, 1983; Krech, Crutchfield, Livson, Wilson, & Parducci, 1982; and Kimble, Garmezy, & Zigler, 1980 do not discuss catharsis in the context of human aggression). In my view, none of the seven introductory psychology textbooks treats catharsis in a satisfactory manner.

One text (Zimbardo, 1979) fails to mention the learning origins of emotional catharsis and also fails to separate behavioral catharsis from emotional catharsis. Five texts (Atkinson, Atkinson, & Hilgard, 1983; Baron, Bryne, & Kantowitz, 1980; Lefrancis, 1980; Mischel & Mischel, 1980; and Worchel & Shebilske, 1983) correctly separate behavioral catharsis from emotional catharsis, but fail to mention the social learning origins of emotional catharsis. One (Gleitman, 1983) defines catharsis but presents no evidence or evaluative conclusions. That misleadingly leaves the novice reader assuming that behavioral and emotional catharsis has been proven and are necessarily linked.

Surprisingly, the specialized textbooks in social psychology do not treat emotional catharsis any more accurately. Four of these books discussed catharsis (Crano & Messe', 1982, did not discuss catharsis). Three textbooks (Baron & Byrne, 1981; Goldstein, 1980; Penrod, 1983) correctly separate behavioral and emotional catharsis, but do not discuss social learning origins of emotional catharsis. One (Gergen & Gergen, 1980) correctly gives the learning interpretation of emotional catharsis but does not cite the crucial Hokanson, Willers, & Koropsak (1968) study.

The following are some of the implications that follow from this discussion. (a) Growth of the knowledge base exazerbates the problem of accuracy and concensus. In 1977 Kelly Shaver estimated that over 90 percent of all research in social psychology was conducted within the previous 25 years. The past six years has produced an awesome increase (Sherif, 1982). (b) Theoretically the problem of validation of textbook accuracy may be understood in terms of social learning theory. Functional analysis suggests that inaccuracy may occur because of the controls from publishers, deans, etc. for the completion of texts and the relative absence of counter-controls that ensure the accuracy of the texts. (c) Merely defining a concept without an accompanying critical evaluation leaves the false impression that the concept is empirically viable and respectable. (d) As I have stated elsewhere (Bertilson, 1983a) attempts at broad coverage run the serious risk of leaving false impressions when that broad coverage means that certain topics are treated superficially. Perhaps our textbooks would serve their purpose better if they treated a few topics thoroughly. (e) Perhaps most important is our responsibility as educators to the control of human interpersonal aggression. In the words of Zillman (1979, p. 376), "Education can do much more, however, than advocate a canon of 'oughts' and 'ought nots' regarding hostility, aggression, violence, and emotion. It can call into question the popular convictions concerning catharsis. It can challenge the currently fashionable reverence for 'deep' gut reactions and feelings as substitutes for reason. . . it seems then an enormous educational accomplishment would already be achieved if hostility and aggression were no longer construed as an undeniable part of human nature."

In psychotherapy, treatments based upon catharsis are more popular than ever--"the noninjurious expression of violence, from ripping dolls to shreds to shouting obscenities in the face of an adversary, that is believed to have great aggression-purging properties" (Zillmann, p. 360). Yet the overwhelming consensus of researchers and theoreticians working on human interpersonal aggression is that such therapy increases rather than decreases aggression (Bandura, 1973; Baron, 1977; Ebbesen, Duncan, & Konecni, 1975; Geen & Quanty, 1977; Zillmann, 1979).

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